

## REPORTING REQUIREMENTS FOR PERSISTENT, BIOACCUMULATIVE, AND TOXIC (PBT) CHEMICALS: AN OVERVIEW

## THE PBT RULE

- PBT chemical rule published in the *Federal Register* (October 29, 1999; 64 FR 58666)
- Rule applied beginning RY 2000
- Rule adds new chemicals to the TRI list
- Rule identifies a subset of chemicals (PBT chemicals) with lower thresholds and special reporting requirements (§372.28)

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## PBT CHEMICALS

- Eighteen chemicals and chemical categories are subject to the PBT chemical rule:
  - Pesticides - Aldrin, Chlordane, Heptachlor, Isodrin, Methoxychlor, Pendimethalin, Toxaphene, and Trifluralin
  - Aromatics - Benzo(g,h,i)perylene, Polycyclic aromatic compounds (PAC) category, Dioxin and dioxin-like compounds category, Hexachlorobenzene, Octachlorostyrene, Pentachlorobenzene, Polychlorinated biphenyls (PCB), and Tetrabromobisphenol A (TBBPA)
  - Metals - Mercury and Mercury compounds

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## PBT CHEMICALS AND THRESHOLDS

### Manufacture, process, and otherwise use thresholds:

- |   |                             |
|---|-----------------------------|
| ■ 100 lbs./yr - Aldrin                        | Polycyclic Aromatic Cmpds . |
| Methoxychlor                                  | Tetrabromobisphenol A       |
| Pendimethalin                                 | Trifluralin                 |
| ■ 10 lbs./yr - Chlordane                      | Benzo(g,h,i)perylene        |
| Heptachlor                                    | Hexachlorobenzene           |
| Mercury                                       | Mercury compounds           |
| Toxaphene                                     | Octachlorostyrene           |
| Isodrin                                       | Pentachlorobenzene          |
| PCBs  |                             |
| ■ 0.1 g/yr - Dioxin and dioxin-like compounds |                             |

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## PBT CHEMICALS

- The following chemicals were NOT designated as PBT chemicals for RY 2000:
  - Vanadium (except when contained in alloy)\*
  - Vanadium compounds\*

\* *Vanadium has a new qualifier and vanadium compounds is a new non-PBT listing*
- A separate rulemaking has designated lead and lead compounds as PBT chemicals beginning RY 2001

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## PBT CHEMICALS AND EXEMPTIONS

- The *de minimis* exemption has been eliminated for PBT chemicals except for purposes of supplier notification
  - Users of mixtures must use best readily available information to determine the PBT chemicals present and their concentrations
- No other Section 313 regulatory exemptions were modified or restricted by the PBT chemical rule

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## PBT THRESHOLDS

- The combination of the low thresholds and no *de minimis* exemption means that a more thorough review of chemical activities may be needed to achieve compliance with the PBT chemical rule
  - Impurities need to be evaluated regardless of concentration
  - As always, chemicals used in low volumes need to be considered

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## SUPPLIER NOTIFICATION

- The supplier notification requirements have not changed
- The *de minimis* exemption still applies to supplier notification
- Suppliers can claim a chemical constituent trade secret and provide a generic chemical name
  - If the facility has no information to identify the constituent as a PBT chemical, based on the activity, the 25,000/10,000 pound threshold may be used
  - If the facility has information that the constituent is a PBT chemical but does not know which PBT chemical activity threshold applies (i.e., 0.1 gram, 10 pounds, or 100 pounds), the 100 pound threshold may be used

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## PBT REPORTING

- EPA has modified the Form R for PBT chemicals
  - Part II, Section 1.4 has been added to Form R
    - » Requires reporting of the distribution of each member of the dioxin and dioxin-like category as percentages among the 17 category members if the data are available
  - When reporting on dioxin and dioxin-like category, TRI-ME/ATRS will automatically recognize units of measure as grams
  - TRI-ME/ATRS will allow for decimal reporting for PBT chemicals (e.g., 9.3 pounds)

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## PBT REPORTING

- For PBT chemicals, EPA is requiring more precise reporting:
  - EPA has prohibited use of Form As
  - EPA has prohibited use of range codes for reporting releases and other waste management quantities (Part II, Sections 5, 6 of Form R)

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## DATA PRECISION

- Report releases and other waste management quantities at a level of precision supported by the data and estimation techniques used
  - If 157.243 pounds calculated, report 157.243, 157.24, 157.2, 157, 160, or 200 pounds depending on accuracy/quality of data and estimation techniques used
- For PBT chemicals, 0.1 pound is the smallest amount required to be reported (except for dioxin and dioxin-like compounds)
  - Estimates  $\leq 0.05$  pounds can be rounded down to zero pounds

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## DATA PRECISION

- For dioxin and dioxin-like compounds, 100 micrograms (equals 0.0001 grams) is the smallest amount required to be reported
  - Estimates  $\leq 50$  micrograms (equals 0.00005 grams) can be rounded to zero grams
- Report releases and other waste management quantities at a level of precision supported by the data and estimation techniques used
  - If 1.57243 grams calculated, report 1.57243, 1.5724, 1.572, 1.57, 1.6, or 2 grams depending on accuracy/quality of data and estimation techniques used

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